Data Quality & Monitoring Plan

Introduction

This document describes the Homeless Management Information System (HMIS) data quality plan for the FL-506 Continuum of Care (CoC). The document includes data quality planning and protocols for ongoing data quality monitoring that meets requirements set forth by the Department of Housing and Urban Development (HUD). It is developed by Big Bend Continuum of Care, the HMIS Lead Agency for FL-506. This HMIS Data Quality Plan is considered part of the HMIS Policies and Procedures and is to be reviewed, revised, and approved annually in accordance with S 578.7(b) of the CoC Program interim rule, and considering the latest HMIS data standards and locally developed performance plans.

What Is a Data Quality Plan?

A data quality plan is a community document that facilitates the ability of the CoC to achieve statistically valid and reliable data. A data quality plan sets expectations for the CoC, the HMIS Lead Agency, and the end users to capture valid and reliable data on persons accessing the homeless assistance system throughout the community. Developed by the HMIS Lead Agency and formally adopted by the CoC, the plan:

- Identifies the responsibilities of all parties within the CoC with respect to data quality;
- Establishes specific data quality benchmarks for timeliness, completeness, accuracy, and consistency;
- Describes the procedures for implementing the plan and monitoring progress toward meeting data quality benchmarks; and
- Establishes a timeframe for monitoring data quality on a regular basis and puts in place sanctions and incentives to continually improve HMIS data quality.

What Is Data Quality?

Data quality is a measurement of the reliability and validity of client-level data gathered and entered into HMIS. Several factors influence good data quality: timeliness of entry, completeness of the data, and accuracy of the data. Adhering to a strong data quality plan will ensure better outcome reporting, easier submissions of grant performance reports such as the HUD Annual Performance Report (APR), and supports the submission of the Longitudinal System Analysis (LSA), System Performance Measures Report (SPMs), Point In Time Count (PIT), and Housing Inventory Count (HIC).

With good data quality, the CoC can tell the story of the population experiencing homelessness. The quality of data is determined by assessing certain characteristics such as timeliness, completeness, and accuracy. In order to assess data quality, a community must first think about what data quality means and document this understanding in a data quality plan.

What Is a Data Quality Monitoring Plan?

A data quality monitoring plan is a set of procedures that outlines a regular, ongoing process for analyzing and reporting on the reliability and validity of the data entered into HMIS at both the project

and aggregate system levels. A data quality monitoring plan is the primary tool for tracking and generating information necessary to identify areas for data quality improvement.

Data Quality Standards

The Data Quality Standards for FL-506 outlined in this plan are applicable to all projects participating in HMIS, with exceptions as noted under each standard. Unless otherwise noted, all participating projects are expected to achieve and maintain the data quality standards; this also includes those projects that are not funded by HUD or other governmental funding bodies, but whose data is used for federal reporting. Providers are expected to identify the appropriate program for their projects and comply with the requirements outlined in this plan.

Timeliness

Entering data in a timely manner can reduce human error that occurs when too much time has elapsed between the data collection and data entry. The individual doing the data entry may be relying on handwritten notes or their own recall of a case management session, a service transaction, or a program exit date; therefore, the sooner the data is entered, the better chance the data will be correct. Real-time data entry (i.e. entering data while interacting with the client) provides the optimum quality when entering data in HMIS. Timely data entry also ensures that the data is accessible when it is needed, either proactively (e.g. monitoring purposes, increasing awareness, meeting funded requirements), or reactively (e.g. responding to requests for information, responding to inaccurate information).

Timely data entry also includes correcting any data quality issues if notified by the CoC or HMIS Lead. In the event an Agency Admin receives notification of data issues needing rectification, the corrections must be made within two business days. If the issues are extensive and will take more than two days, the agency will provide a reasonable estimate of the time necessary to correct the data.

Target

Real time data entry is encouraged and considered a best practice. Otherwise, agencies should aim to have data entered within 24 hours of client contact.

When a client is initially enrolled in a project, the following information must be entered into HMIS in real-time or within 24 hours:

Entry Type	Data Element	Collected For	Entry Creation	Project Start	Interim Update	Annual Assessment	Project Exit	Post-Exit
All	Name	All	X					
All	Social Security Number	All	X					
All	Date of Birth	All	X					
All	Race	All	X					
All	Ethnicity	All	X					
All	Gender	All	X					
All	Veteran Status	HoH/Adults	X					
All	Disabling Condition	All		X				
All	Project Start Date	All		X				
All	Project Exit Date	All					X	
All	Destination	All					X	
All	Relationship to HoH	All		X				
All	Client Location	HoH		X	X			
All	Housing Move-In Date	HoH			X			
All	Prior Living Situation	HoH/Adults		X				
All	Income and Sources	HoH/Adults		X	X	X	X	
All	Non-Cash Benefits	HoH/Adults		X	X	X	X	
All	Health Insurance	All		X	X	X	X	
All	Disabilities	All		X	X		X	
All	Domestic Violence	HoHAdults		X	X			
STO	Current Living Situation	HoH/Adults		X	X			
STO	Date of Engagement	HoH/Adults	X	X				
CE	CE Assessment	HoH	X	X				
CE	CE Event	HoH	X	X				
HOPWA	Services Provided	All			X			
HOPWA	Financial Assistance	HoH			X			
HOPWA	Medical Assistance	All w/HIV or AIDS	X	X			X	
HOPWA	T-cell and Viral Load	All w/HIV or AIDS	X	X		X	X	
HOPWA	Housing Assess. at Exit	All					X	
PATH	Services Provided	Adults			X			
PATH	Referrals Provided	Adults			X			
PATH	PATH Status	Adults			X			
PATH	Connection with SOAR	Adults		X	X	X	X	
RHY	Referral Source	Adults		X				
RHY	RHY-BCP Status	All		X	X			
RHY	Sexual Orientation	Adults		X				
RHY	Last Grade Completed	Adults		X			X	
RHY	School Status	Adults		X			X	
RHY	Employment Status	Adults		X			X	
RHY	General Health Status	Adults		X			X	
RHY	Dental Health Status	Adults		X			X	
RHY	Mental Health Status	Adults		X			X	
RHY	Pregnancy Status	Female Adults		X	X			
RHY	Formerly Foster	Adults		X				
RHY	Formerly Juvenile	Adults		X				
RHY	Family Issues	Adults		X				
RHY	RHY Service Connections	Adults			X			
RHY	Commercial Sexual Expl.	Adults					X	
RHY	Labor Exploitation	Adults					X	
RHY	Project Completion Stat.	Adults					X	
RHY	Counseling	Adults					X	
RHY	Safe & Appropriate Exit	Adults					X	
RHY	Aftercare Plans	Adults						X
RHY	Veteran's Information	All Veterans	X					
VA	Services Provided	All			X			
VA	Financial Assistance	All			X			
VA	Percent of AMI	HoH		X				
VA	Last Permanent Address	HoH		X				
VA	VAMC Station Number	HoH		X				
VA	HP Targeting Criteria	HoH		X				
VA	HUD-VASH Voucher Track	Veteran HoH		X	X		X	
VA	HUD-VASH Exit Info	Veteran HoH					X	

Housing Move-In Date (Residential Projects)

Movement into housing at Permanent Housing projects ("Housing Move-in Dates") should be documented within two business days of the client physically moving into their unit or having the keys to their unit. This is not applicable to non-permanent housing projects. For further clarification, if a client enters a project on a Wednesday, the Entry record should be created in HMIS on or before Friday.

Exit Data

All data required to be collected at project exit is to be made available in HMIS within two working days of the client exiting any project type. When a client is exited from a project in HMIS, they should be exited as of the date they last utilized the bed/services provided by the project. (For example, if a client last received services from a project on 1/10/2023, they should be exited from the project on 1/10/2023, even if the user is doing the data entry on a future date.)

Completeness

Complete HMIS data helps a CoC meet various funding compliance requirements, and ensures that persons in the homeless assistance system receive the services needed to secure and maintain permanent housing. Additionally, it is necessary to fully understand the demographic characteristics and service use of persons accessing the homeless housing and services in the community.

Complete data facilitates confident reporting and analysis on the nature and extent of homelessness, including:

- Unduplicated counts of persons served;
- Patterns of use of persons entering and exiting the homeless assistance system in the community; and
- Evaluation of the effectiveness of the community's homeless assistance system.

Data Elements

The Continuum of Care's goal is to collect 100% of all data elements. However, the CoC recognizes this may not be possible in all cases. Therefore, the CoC has established an acceptable range of missing/null, don't know, refused, and data not collected responses, depending on the data element and the type of program entering data.

Target

All data in HMIS should be collected and entered in a common and consistent manner across all programs. Data collection and entry should be conducted in accordance with the most current HUD HMIS Data Standards.

All data entered into HMIS should be complete. Partially complete or missing data (e.g., missing digit(s) in a SSN, missing the year of birth, missing information on disability or veteran status) can negatively affect the ability to provide comprehensive care to clients. Missing data could mean the client does not receive needed services – services that could help them become permanently housed and end their episode of homelessness.

While HUD has not provided specific percentages of acceptable rates of missing or unknown data, there are statewide data standards that encourage no more than **5%** of a given data element to have missing or unknown data. The goal, however, is 100% completion whenever possible. Complete data also includes entering the data for all clients served. Additionally, complete data also refers to the completeness of bed utilization in the system. Consistent data refers to agencies collecting data using the same definitions and entering data that has no contradictions. Consistent data has no values that are impossible; child veterans, for example.

All Clients Served

HUD expects that all clients receiving housing and/or services through the homeless assistance system will have their service delivery documented in HMIS. If a program only enters data on a few of its clients, the program's efficacy cannot accurately be determined. Incomplete data may erroneously reflect low bed utilization rates (for shelter/housing programs), and may inaccurately reflect client's progress in meeting programmatic goals (i.e. employment, transitioning to permanent housing).

For clients who do not wish their information to be shared within HMIS, their information can be entered and only the staff at the agency where the data was entered and HMIS System Administrators will be able to access that data. Whereas FL-506 maintains a target of 100% of clients served will be included in HMIS, no agency will be permitted to refuse or change their service delivery based on whether a client agrees to have their data entered within HMIS.

Target

All programs using HMIS will enter data for one hundred percent (100%) of clients served.

All projects participating in HMIS are required to comply with the data standards. Data entered needs to be valid and accurately represent information on the clients being served.

Universal Data Elements (UDE)

The purpose of the UDEs is to ensure that all service providers participating in HMIS are documenting the data elements necessary to produce Continuum-wide unduplicated count of clients served. This provides accurate counts for various reporting requirements, including the Annual Performance Report (APR) and the Longitudinal System Analysis (LSA) collected by the U.S. Department of Housing and Urban Development (HUD), plus other reporting requirements. This also ensures that the CoC has sufficient client data to conduct basic analysis on the extent and characteristics of the populations they serve.

Program Specific Data Elements (PDEs)

As outlined in the HUD Data standards, which Program Specific Data Elements are required is dictated by the reporting requirements set forth by each Federal partner for each of their projects. For the purposes of consistency, elements in the Entry Assessment are required for all projects participating in HMIS. This ensures all service providers are documenting the data elements necessary to produce the Annual Performance Report or ESG-Caper.

Bed Utilization

One of the primary features of HMIS is its ability to record the number of client stays or bed nights at a homeless residential facility. Bed utilization is based on the bed and unit inventory as set up by Big Bend Continuum of Care and the number of program participants and households served in that project. Changes over time should be documented at least annually as it is reported in the Homeless Inventory Count.

A program's bed utilization rate is the number of beds occupied as a percentage of the entire bed inventory. When a client is enrolled into a residential program (emergency/safe haven, transitional/rapid re-housing, or permanent), they are assigned to a bed or unit. The client remains in that bed or unit until they are transferred to another bed or unit, or is exited from the program. When the client is exited from the program, they are also exited from the bed or unit in HMIS.

The CoC recognizes that new projects may require time to reach the projected occupancy numbers and will not expect them to meet the utilization rate requirement during the first operating year. Projects are to monitor themselves monthly on completeness of data entry which can be tracked in HMIS, with

status and/or issues communicated to Big Bend Continuum of Care, who will also perform monitoring throughout the year.

Low utilization rates can indicate a program operating under capacity or it could be a sign that 100% of clients served were not entered into HMIS.

Accuracy

Accurate collection and entry of data into HMIS ensures the data is the best possible representation of reality as it relates to people experiencing or at risk of homelessness and the programs that provide homeless housing and services. HMIS data should accurately reflect any data collected in a physical file, along with information known about the client and the housing and/or services received by the client. All data entered (manually or through data exchange) into HMIS should be a reflection of information provided by the client and as documented in the client's file. Changes or updates in client information should be reflected in HMIS as they occur. To ensure the most up-to-date and complete data, data entry errors should be corrected monthly, or more frequently as required.

Often, false or inaccurate information is worse than incomplete information, since with the latter, it is at least possible to acknowledge the gap. Thus, it should be emphasized to clients and staff that it is better to enter nothing (or preferably "don't know" or "refused") than to enter inaccurate information. To ensure the most up-to-date and complete data, data entry errors should be corrected on a monthly basis.

Consistency

Consistency of data directly affects the accuracy of data. Consistency ensures that data is understood, collected, and entered in the same manner across all programs in HMIS. Basic enrollment (intake), annual assessment, and exit workflows/forms, designed to capture client data pursuant to HUD's HMIS Data Standards, provide for common and consistent data collection and are available to all programs. To that end, all intake and data entry staff will complete an initial basic user training before accessing HMIS and complete ongoing training provided by HMIS staff.

To ensure that data collected and entered into HMIS are consistent across all projects:

1. Every HMIS user is required to complete a new user training on the system, policies, procedures, and protocols prior to receiving access to the system. Current users are required to take an annual recertification course.
2. A standardized intake assessment as specified by Big Bend Continuum of Care must be used by all providers to collect data in a consistent manner.
3. New agencies that join the CoC are required to review and understand all policies and procedures including data quality requirements.
4. Providers will make every effort to record accurate data.

Monitoring

The purpose of monitoring is to ensure that the agreed-upon data quality targets are met to the greatest extent possible, and that data quality issues are quickly identified and resolved. The CoC recognizes that the data produced from HMIS is critical to meet the reporting and compliance requirements of HUD, the individual agencies, and the CoC as a whole.

To ensure that all projects are in compliance with the requirements and expectations outlined in this plan, Big Bend Continuum of Care staff will monitor data on a monthly basis to identify and resolve any issues that affect the timeliness, completeness and the accuracy of data.

Incentives

Agencies should be creative in finding ways to incentivize excellent data quality. Actively monitoring data quality within the organization will lead to agencies being able to easily identify high performing staff, those who've shown great improvement, and those who may still struggle with data entry. When an agency identifies a staff person continuing to struggle with their data quality, the option for retraining exists. Continuum of Care CoCs incentivize data quality through their annual CoC Prioritization process. The better the data quality, the better the data reflects the progress a project is making with their clients. This can lead to a higher rank for the HUD NOFA process, and more funding opportunities

Training

The Big Bend Continuum of Care HMIS team is responsible for training all agency users. In addition to this initial training for new users, ongoing training sessions are held monthly which cover commonly-asked questions, and refresher items to ensure quality data entry. In addition to training, the CoC HMIS Help Desk is available to assist agencies with any HMIS-related technical support.

Data Quality Monitoring Plan

The Data Quality Monitoring Plan entails a set of procedures that outlines a regular, ongoing process for analyzing and reporting on the reliability and validity of the data entered into HMIS at both the project and aggregate system levels. This plan serves as the primary tool for tracking and improving data quality for FL-506.

The following sections are covered under this monitoring plan:

A. Roles and Responsibilities
B. HMIS Lead Timelines
C. Timelines for Data Quality reports
D. Compliance and Monitoring frequency
E. Data Quality Reports and Outcomes

A. Roles and Responsibilities

Agencies

Individual Partner Agencies are at the front line of good data quality. Fostering a culture that uses data to make programmatic decisions will also encourage staff to enter data accurately, completely, and timely. Agencies can run the Data Quality Framework (DQF) report in HMIS to review the data quality within their projects. The Agency should run the report as often as possible to catch issues before they become problematic, with the recommendation that the report is run and reviewed at least once per month. This includes doing client file spot checks to ensure the data in a client file matches what was entered into HMIS when necessary. When agencies determine a staff person is struggling to maintain good data quality, they should strongly consider providing additional training support in house or referring the staff person for additional training from Big Bend Continuum of Care.

Continuum of Care

The CoC regularly reviews the Data Quality Reports available in HMIS for the CoC's projects. Because data quality is critical to the operation of the entire system, all projects in the CoC should be included in the reporting, not just HUD funded projects.

HMIS Lead

The HMIS Lead (Big Bend Continuum of Care) ensures HMIS is operational and able to meet the specifications outlined by HUD and other federal partners. Big Bend Continuum of Care ensures that all

required reports are available and functional in the system and communicates visible data quality issues to the agencies.

HMIS Committee

The HMIS Committee provides authorization for, and oversight of, the Data Quality program. They will support the efforts of the Big Bend Continuum of Care HMIS Team by enforcing the incentives described in the data quality plan.

B. HMIS Lead Timelines

It is the responsibility of Big Bend Continuum of Care to submit four important reports on behalf of FL-506: Longitudinal Systems Analysis (LSA), System Performance Measures (SPM), Point in Time Count (PIT), and Housing Inventory Count (HIC).

These reports are submitted annually on dates determined at HUD's discretion.

C. Timelines for Data Quality Reports

While it is highly recommended that every project run the reports on a monthly basis, each of the projects are required to be in compliance with HUD Data Standards. Big Bend Continuum of Care will provide the following reports by the 10th of every month:

1. Data Quality Framework
2. Data Completeness Report Card

D. Monitoring Frequency

To ensure accurate reporting to federal partners, the Big Bend Continuum of Care will perform routine reviews of the data at the beginning of each month. The following will be the generally expected flow of monitoring, counseling and/or corrective actions regarding data quality:

1. Each HMIS-contributing agency and Big Bend Continuum of Care will review DQFs and Data Completeness Report Cards monthly.
    a. Should agency quality outcomes for timeliness, completeness, accuracy and/or consistency fall outside acceptable benchmark parameters, said outcomes will be reported to the person designated as Agency Admin.
    b. Reporting of data quality issues to Agency Admins offers Big Bend Continuum of Care and the agency an opportunity to collaborate to correct the problem, to spot other potential problems before they arise, and to identify ways to improve systemically.
2. Additional monitoring may be conducted as needed, particularly if an agency continues to have data quality that falls outside parameters. Big Bend Continuum of Care's monitoring could consist of spot checks of data quality and could include a review of the agency's record keeping process. If issues are reported or suspected, this may prompt required intensive HMIS training.
3. More isolated problems or those of lesser severity or urgency may not result in concerns unless or until an agency has been shown to have the same or similar problem in repeated monthly reports.
    a. While all reasonable efforts as outlined above will be made by Big Bend Continuum of Care to collaborate with a given agency to improve data quality problems that might occur, should those efforts fail or the agency is non-compliant with training, significant and/or egregious data quality problems that continue unresolved and/or which impact the wider CoC community may result in agency or user HMIS licenses being suspended.
    b. It is the responsibility of the Agency Admin to ensure compliance with all data quality requirements and will be notified if their program does not meet any or all of the requirements.

c. For all HUD-funded projects, lack of compliance with data quality requirements may result in forfeiting points in the annual local NOFA rating and ranking, as determined annually by Big Bend Continuum of Care's Executive Committee. Similar negative impact may occur on grants that require the use of HMIS reporting.

4. In addition to the above, Big Bend Continuum of Care HMIS staff will conduct a monthly HMIS-only HIC and PIT count to ensure Bed and Unit inventory utilization match agency-reported available beds in Provider Admin. Any discrepancies will be communicated to the Agency Admin.

E. Data Quality Reports and Outcomes

Big Bend Continuum of Care HMIS staff will send data quality monitoring reports to the Agency Admin. Reports will indicate the percentage of data errors. The CoC benchmark is an error rate of 5% or less. If the agency fails to make corrections, or if there are repeated or egregious data quality errors, HMIS staff will require intensive training or a repeat of basic user training.

Big Bend Continuum of Care Internal Reports

In addition to the reports listed above, Big Bend Continuum of Care executes the following reports monthly:

Report Name	Description/Purpose	Action
Case Notes	Checks for recent case notes for open entries.	Agency and user notified.
Chronicity DQ	Finds missing data elements used to determine chronic status.	Agency Admin and user notified. Retraining or intensive training possible depending on severity.
Client Location	Looks at Client Location CoC Code and highlights missing codes or codes other than FL-506.	Agency and user notified.
Date of Birth	Reviews data for missing DOBs and DOBs that result in negative age or age over 100.	Agency and user notified.
Duplicate Clients	Finds clients with the same DOB, SSN, Name.	Corrected by HMIS staff.
Duplicate Entries	Checks for entries for the same client on the same date for the same agency.	Corrected by HMIS staff.
Exit Destination	Looks for missing exits, and exits to other than PH if client subsequently entered PH with a PH entry in HMIS.	Corrected by HMIS staff.
Funding Information	Examines at funding sources in HMIS to ensure they are accurate and current.	Agencies are required to report funding sources annually or when funding changes.
Head of HH DQ	Looks for entries with missing HoH, households with no HoH, and children as HoH.	Agency and user notified.
Housing Inventory	Big Bend Continuum of Care runs this report on the last Wednesday of every month to look for irregularities in enrolled clients vs Bed and Unit inventory in Provider Setup.	Agency notified if enrollments fall outside of the norm. Inventory adjustments are made when necessary.
Housing Move In	Checks HMI dates for: • dates prior to project entry,	Agency and user notified and asked to correct within two

	• no HMI date with long/open enrollment in PH, and • dates greater than the current date.	business days. Re-training may be recommended.
Income Data Quality	Examines income for: • mismatches (yes to receives income, but no income sources listed), • SSI/SSDI with no disability. • Same income source with open entries • SSI/SSDI amounts not updated, etc.	Agency and user notified and asked to correct within two business days. Re-training may be recommended.
Point In Time	Big Bend Continuum of Care runs this report on the last Wednesday of every month to look for irregularities in enrolled clients vs Bed and Unit inventory in Provider Setup.	Agency notified if enrollments fall outside of the norm. Inventory adjustments are made when necessary.
Project Length of Stay	Looks at length of stay and checks for: • Long stays in emergency shelter • Stays longer than CoC standards for RRH. • Long stays in PH with no HMI date.	Agency and user notified and asked to correct within two business days.
Referrals	Checks that accepted referrals to PH have an HMI within 90 days.	Agency and user notified and asked to correct within two business days.
ROI	Ensures that all clients with open entries have non-expired ROIs.	Agency and user notified and asked to correct within two business days.
Services	Examines service entries for PH projects to look for current services, specifically Case Management services greater than one year for PH and 90 days for RRH.	Agency and user notified and asked to correct within two business days.
SSI/SSDI and Disability	Looks for discrepancies in reported disability and the receipt of SSI/SSDI.	Agency and user notified and asked to correct within two business days.
SSVF/VA Missing Data	Examines all data elements required for SSVF and VA projects to look for missing data.	Agency and user notified and asked to correct within two business days.
Underage Veterans	Checks for Veteran Status set to yes for clients under 18 years of age.	Corrected by HMIS staff.
User Login Report	Looks for users who have not logged in to HMIS in the last 30 days.	Agency is notified. Users are locked out of HMIS and required to re-take basic user training. There are no exceptions.